## ABSTRACT OF THE DISCLOSURE

A data transmission device and a data transmission method are adapted to add an RTP time stamp accurately synchronized with the PCR when sequentially transmitting data stored in a recording medium in advance with the MPEG2-TS format or data sequentially formatted to the MPEG2-TS format by means of hardware according to the RTP. With a data transmission device and a data transmission method according to the invention, a TS packet containing header information and real time data, the header information including at least synchronizing time reference information (PCR) necessary for producing a synchronizing signal to be used by the receiving side, is received as input by data reading section 11, the PCR is extracted from the input TS packet by PCR reading section 12, the extracted PCR is converted into a time stamp by RTP time stamp computing section 13, an RTP packet containing header information including the RTP time stamp and TS packets is prepared by RTP packet preparing section 14 and the prepared RTP packet is transmitted by data transmitter 15.